

CLAIMS

1. A body motion evaluation apparatus capable of being attached to a human body, comprising:

acceleration detecting means of detecting information about an acceleration produced with a motion of a human body;

calculating means of performing predetermined calculation based on said information about the acceleration detected by said acceleration detecting means;

calculation controlling means of setting a predetermined calculation time period in said calculation by said calculating means; and

signal receiving means of receiving from outside a first behavior detection signal including information about detection of a start or end of a first predetermined behavior of said human body,

wherein said calculation controlling means determines a start point of said calculation based on said first behavior detection signal received by said signal receiving means, and sets as said calculation time period a time period from said start point until predetermined time elapses.

2. The body motion evaluation apparatus according to claim 1, comprising controlling means of controlling said acceleration detecting means, wherein said controlling means turns on the power of said acceleration detecting means at

a time when said first behavior detection signal is detected by said signal receiving means, and turns off the power of said acceleration detecting means after predetermined time elapses.

3. The body motion evaluation apparatus according to claim 2, wherein said acceleration detecting means detects

(1) a first acceleration being an acceleration in a body axis direction of said human body; and

(2) at least any one of a second acceleration being an acceleration orthogonal to said body axis direction and in a front direction of said human body, and a third acceleration orthogonal to both the body axis direction of said human body and the front direction of the human body.

4. The body motion evaluation apparatus according to claim 3, wherein said acceleration detecting means detects an acceleration direction of gravity based on said first acceleration and said second acceleration detected.

5. The body motion evaluation apparatus according to claim 4, wherein said calculating means calculates the result of integration of a variation in a signal obtained by said acceleration detecting means, or a period of variation in said signal.

6. A body motion evaluation system comprising:

first behavior detecting means of detecting a start or end of said first predetermined behavior of a human body, and outputting said first behavior detection signal; and

the body motion evaluation apparatus according to claim 1 or claim 2.

7. The body motion evaluation system according to claim 6, wherein said first behavior detecting means is infrared light projecting means or electric field generating means, and

said signal receiving means is (1) infrared light receiving means or (2) electric field receiving means and signal demodulating means.

8. The body motion evaluation system according to claim 7, wherein said first behavior detecting means comprises

(1) signal sending means of sending said first behavior detection signal; and

(2) passage detecting means of detecting a passage state in which an object passes through a predetermined detection range, door opening/closing means of detecting open/close of a predetermined door, or load detecting means of detecting a load of an object at a predetermined location.

9. The body motion evaluation system according to claim 8, wherein said load detecting means is departure/seating detecting means of detecting a departure state in which an object departs from a toilet seat, or detecting a seating state in which said object is seated on said toilet seat.

10. The body motion evaluation system according to claim 9, wherein said departure/seating detecting means comprises

(1) a load sensor detecting a load applied to said toilet seat;

(2) departure/seating state determining means of determining a departure state from a load detected by said load sensor.

11. The body motion evaluation system according to claim 10, wherein said departure/seating state determining means

(1) makes a determination as said departure state at a time when the load detected by said load sensor is detected as a load equal to or smaller than a first predetermined value, or

(2) makes a determination as said departure state at a time when the load detected by said load sensor is detected as a load equal to or smaller than the first predetermined value, and predetermined time elapses.

12. The body motion evaluation system according to claim 11, wherein said departure/seating state determining means

determines that said object is in a seating state at a time when it is detected that the load detected by said load sensor is equal to or greater than the first predetermined value.